

ECONOMIC FUTURES SUMMARY

Marshall County Minnesota

The Marshall County Economic Development Authority requested University of Minnesota Extension prepare a summary of their economy under the Economic Futures program. A workshop was scheduled for June 2017. Due to low projected attendance, the workshop was cancelled. This summary was prepared.

WHAT IS AN ECONOMIC FUTURES WORKSHOP?

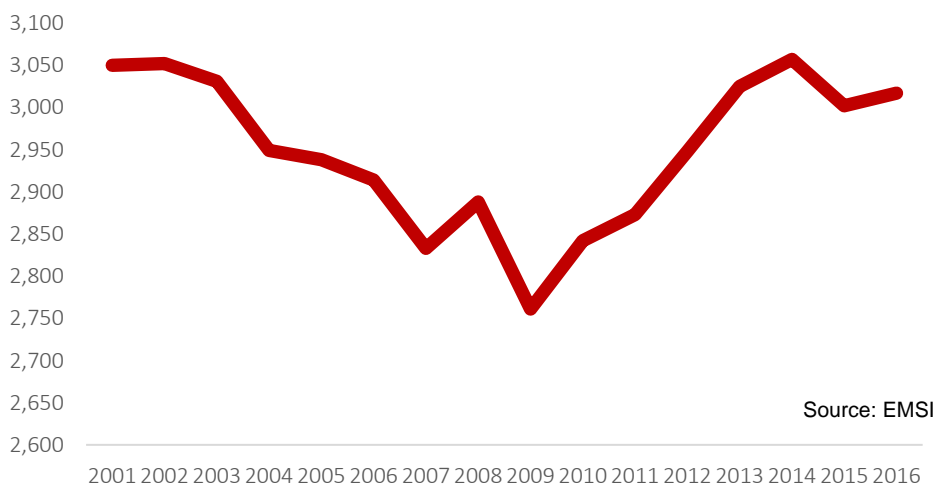
The Economic Futures Workshop is designed to help community leaders look objectively at the state of their local economy. The workshop examines the interactions within an economy – among businesses and between businesses and consumers. Using information about how these linkages function, leaders can begin to understand the full implications of change on the local economy. The Futures Workshop can also help communities understand how efforts by different organizations can affect the economy.

The three hour Futures Workshop provides a profile of the county economy, an analysis of how ten selected industries interact, and a facilitated discussion of the industries.

PROFILE OF THE CURRENT ECONOMY

In 2016, there were a total of 3,017 full-time, part-time, and seasonal jobs in Marshall County (Chart 1).¹

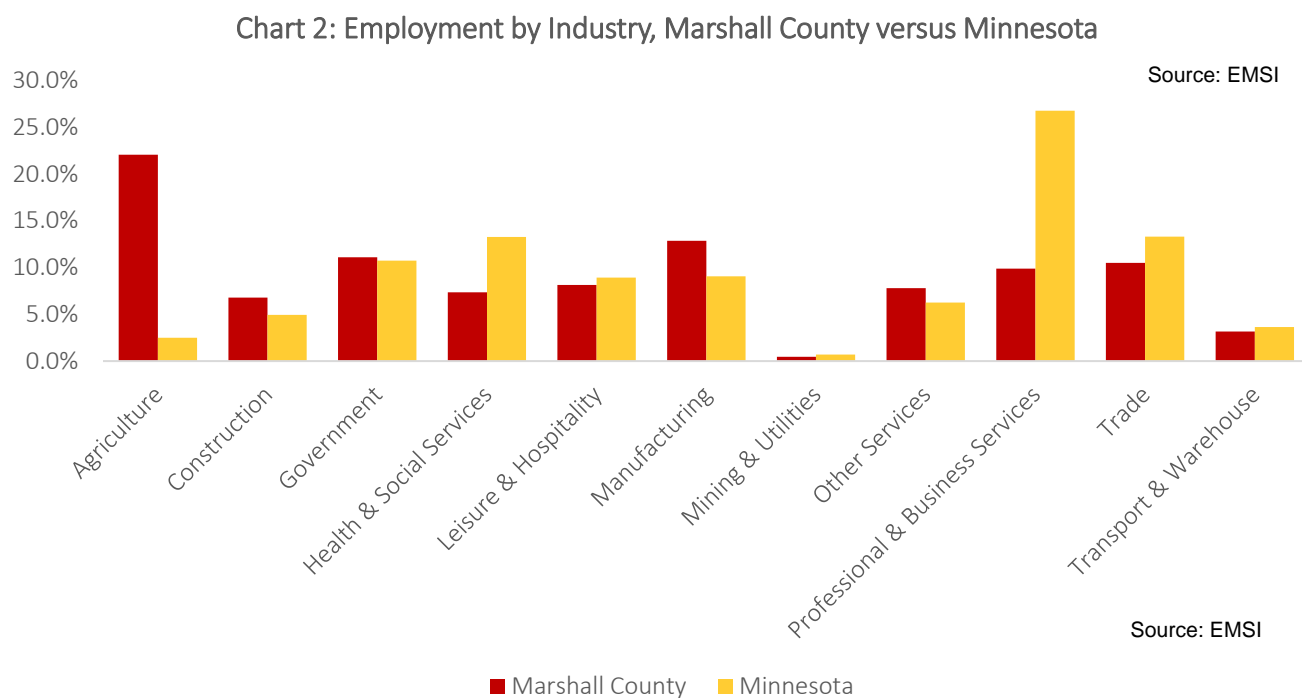
Chart 1: Employment, Marshall County, 2001-2016



¹ Source: EMSI (Economic Modeling System) www.economicmodeling.com, based on QCEW data.

The number of jobs in Marshall County declined between 2001 and 2009 with the total number of jobs in the county dropping to 2,761 in 2009. Since the Great Recession, Marshall County has been steadily adding jobs. Employment in 2016 was fairly equal to employment in 2001.

Chart 2 compares the percent of jobs by industry in Marshall County to the state of Minnesota. The largest industry in Marshall County was agriculture, employing 22 percent of the workforce. In comparison, Minnesota had only 2.5 percent of its employment in agriculture, making the industry a relative strength for the county. Other relative strengths in Marshall County include manufacturing, construction, and other services.



Industries adding the most jobs between 2001 and 2016 include crop and animal production (199 new jobs), health and social services (60 jobs), and wholesale trade (30 jobs). Industries shedding the most jobs in the same period include government (-111 jobs), retail trade (-93 jobs), and other services (-70 jobs). The source of this data is EMSI.

Wages in Marshall County are lower than the Minnesota average. Marshall County's average weekly wage across all industries was \$833 in 2015.² Minnesota's average weekly wage across all

² Wages include bonuses, stock options, severance pay, profit distributions, cash value of meals and lodging, tips, and other gratuities.

industries was \$1,030.³ Interestingly, the wage gap between Marshall County and Minnesota has been declining. Marshall County's wages have been increasing at a rate faster than the state. This indicates wage pressures in Marshall County.

ANALYSIS OF INDUSTRIES

Ten industries were selected for analysis. Industry selection was based on primary industries in Marshall County. The input-output model IMPLAN was used in the analysis.

Note: these industries were also selected to represent a diverse range of economic activities in Marshall County. These industries are intended as examples.

Farm machinery and equipment	Hospitals
Wholesale trade	Retail, food and beverage
Grain farming	Banking
Rice milling	Fluid meter and control devices
Construction	Restaurants

EXTENSION STAFF

The following University of Minnesota Extension staff participated in the planning and preparation of the Economic Futures summary for Marshall County.

Brigid Tuck, Economic Impact Analyst
Rani Bhattacharyya, Extension Educator
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INDUSTRY ANALYSIS RESULTS


Following are the results of the analysis for the ten selected industries. In a Futures Workshop, these are the basis for discussion.

How to Interpret the Industry Analysis

The analysis includes four PowerPoint slides for each industry.

Slide 1: Overview of the Industry in Marshall County

³ Source: Quarterly Census of Employment and Wages (QCEW), MN Department of Employment and Economic Development, <http://mn.gov/deed/>.



The first slide gives a snapshot overview of the industry as it currently exists in the county. It includes the number of jobs, total output, and number of establishments. It also shows the ratio of input purchases to labor purchases. It lists the top three products purchased by the industry. Finally, the average weekly wage is provided.

Slide 2: National Industry Trends

The second slide shows how the industry has been faring nationally and compares that to local growth. It compares that national growth rate of the industry to the local growth rate. Thus, one can determine if the industry is growing at rates above, below, or similar to the national rate.

Slide 3: Economic Impact of 100 Jobs in the Industry

The third slide shows the impact if 100 jobs were to be added in the industry. The analysis was completed using the input-output software, IMPLAN.

Slide 4: Top Industries Impacted

The final slide shows the top industries impacted, measured as jobs. This slide highlights which industries will benefit the most from an expansion of the selected industry.

FARM MACHINERY MANUF.: MARSHALL COUNTY

- 40 employees (2015, IMPLAN)
- 3 establishments (2016, EMSI)
- \$23.7 million in output generated
- 75% of expenditures are for inputs
 - Iron & steel, wholesale trade, other engine equipment
- 25% for labor
 - Average weekly wage: \$946 (2016, QCEW)
- This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment, and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).
- Example business: H&S Manufacturing, Chanlin Inc.

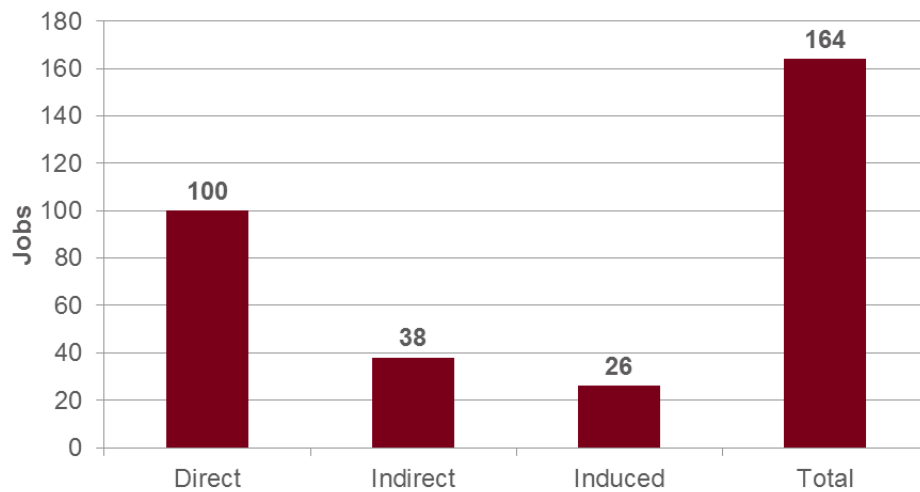
FARM MACHINERY: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
58	43	-15

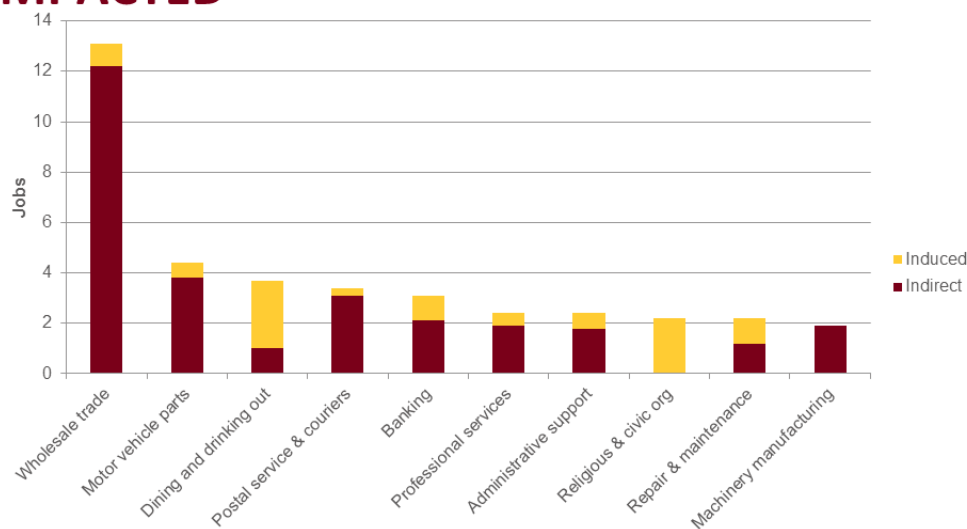
National Growth	Industry Mix	Competitive Effect
6	-8	-12

Bottom line: The number of jobs in farm machinery and equipment manufacturing dropped modestly between 2001 & 2016. While the industry also shed jobs nationally, the job losses in Marshall County were higher than anticipated based on industry conditions.

FARM MACHINERY: MARSHALL COUNTY



FARM MACHINERY: TOP INDUSTRIES IMPACTED



HOSPITALS: MARSHALL COUNTY

- 89 employees (2015, IMPLAN)
- 1 establishment
- \$12.7 million in output generated
- 46% of expenditures are for inputs
 - Insurance, pharmaceuticals, real estate
- 54% for labor
 - Average weekly wage: \$610 (2016, all health care, QCEW)
- This industry comprises establishments known and licensed as general medical and surgical hospitals primarily engaged in providing diagnostic and medical treatment (both surgical and nonsurgical) to inpatients with any of a wide variety of medical conditions.
- Example business: North Valley Health Center

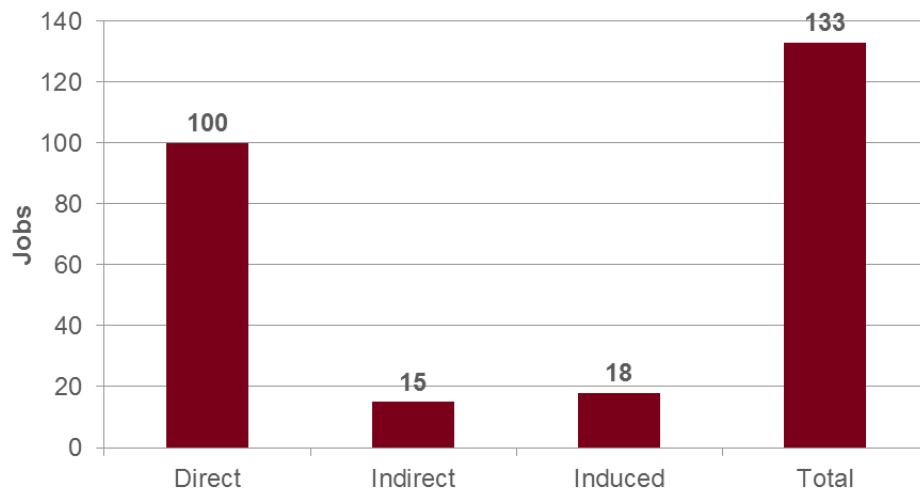
HOSPITALS: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
69	100	31

National Growth	Industry Mix	Competitive Effect
7	11	14

Bottom line: The number of jobs at hospitals in Marshall County grew by nearly 50% between 2001 & 2016. Health care was the fastest growing industry in the US in the period, so growth was anticipated. However, Marshall County added 14 more jobs than expected.

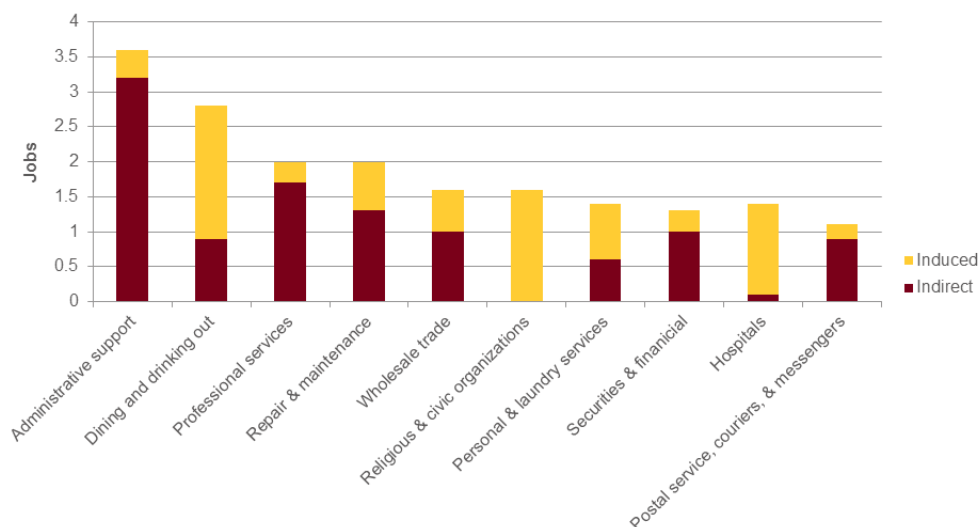
HOSPITALS: MARSHALL COUNTY



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HOSPITALS: TOP INDUSTRIES IMPACTED



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WHOLESALE TRADE: MARSHALL CO.

- 232 employees (2015, IMPLAN)
- 23 establishments (2016, EMSI)
- \$64 million in output generated.
- 33% of expenditures are for inputs
 - real state, management of companies, advertising and public services
- 67% for labor
 - Average weekly wage: \$905 (2016, QCEW)
- This industry comprises establishments primarily engaged in the merchant wholesale distribution of public needs.
- Example businesses: Newfolden Co Op Elevator Association, Farmers Union Oil Co., Hapka Seed Co, Stanley Home Products, Grygla Auto Supply



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WHOLESALE: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
180	210	30

National Growth	Industry Mix	Competitive Effect
17	-13	26

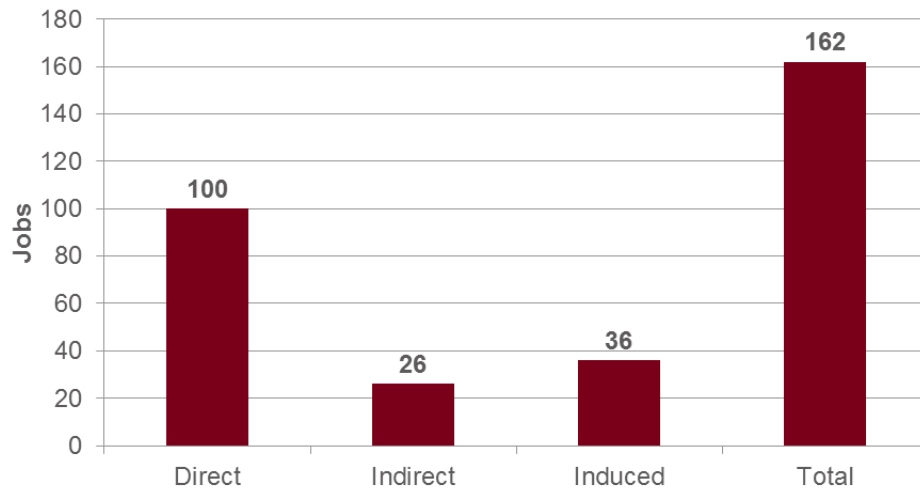
Bottom line: Wholesale trade businesses in Marshall County grew employment at a moderate pace between 2001 & 2016. The number of jobs in wholesale trade, nationally, declined in this period. Marshall County outperformed industry averages.



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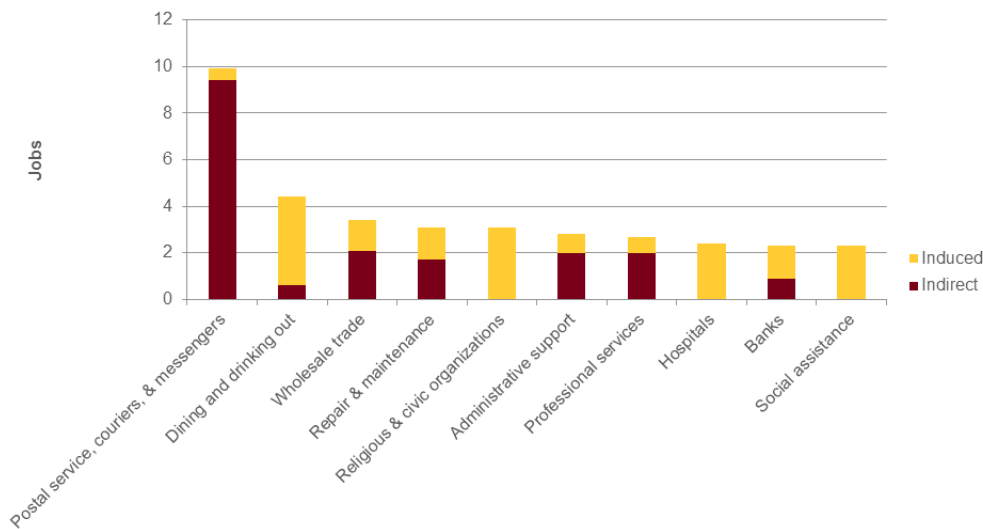
WHOLESALE TRADE: MARSHALL COUNTY



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WHOLESALE: TOP INDUSTRIES IMPACTED



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GRAIN FARMING: MARSHALL COUNTY

- 522 employees (2015, IMPLAN)
- \$113.5 million in output generated
- 78% of expenditures are for inputs
 - Support activities, pesticides, real estate
- 22% for labor
 - Average weekly wage: \$538 (2016, QCEW)
- This U.S. industry comprises establishments primarily engaged in growing grains and/or producing grain(s) seeds



GRAIN: INDUSTRY TRENDS

Jobs 2002	Jobs 2016	Change 2002-2016
114	395	281

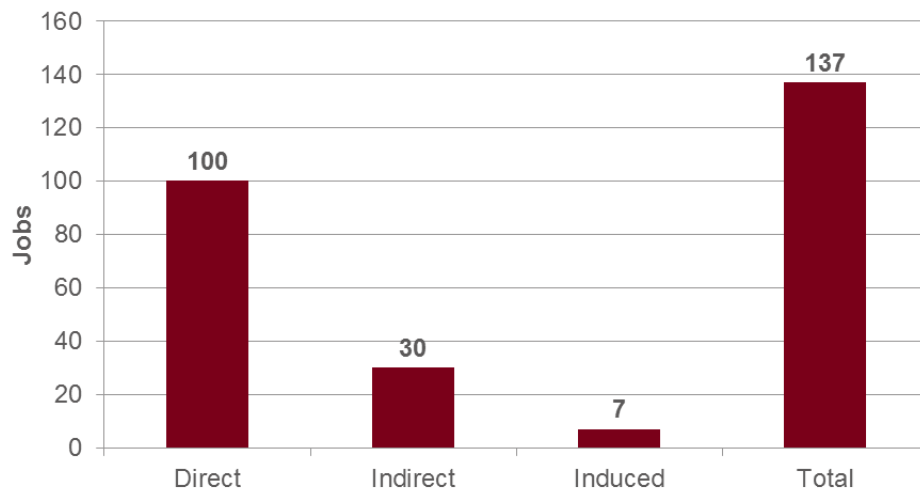
National Growth	Industry Mix	Competitive Effect
12	-15	285

Bottom line: Grain production in Marshall County rapidly added jobs between 2002 & 2016. It far outperformed industry expectations.

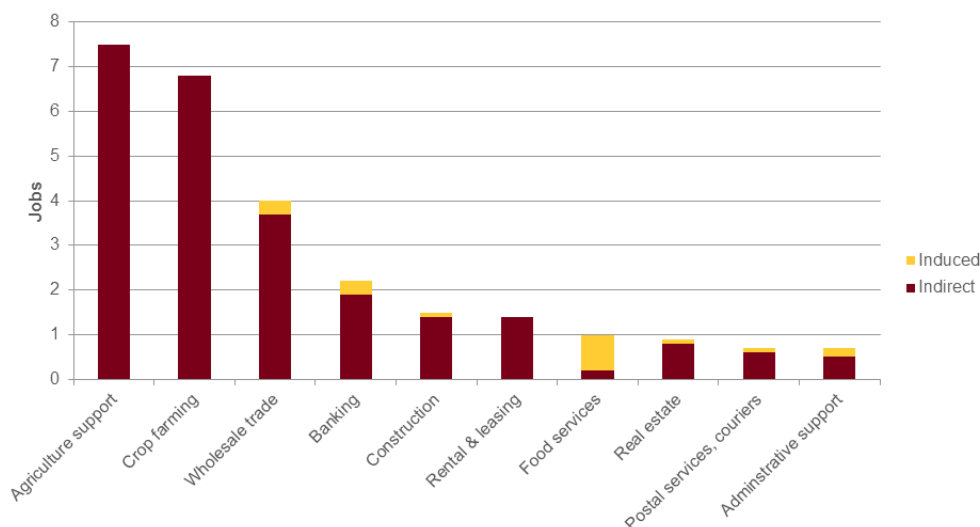
Note: Grain prices were at relatively low levels in 2015. This would affect industry production figures presented in the previous slides.



GRAIN FARMING: MARSHALL COUNTY



GRAIN: TOP INDUSTRIES IMPACTED



BANKING: MARSHALL COUNTY

- 96 employees (2015, IMPLAN)
- 7 establishments (2016, QCEW)
- \$18 million in output generated.
- 45% of expenditures are for inputs
 - Financial vehicles, banking, securities and commodities
- 55% for labor
 - Average weekly wage: \$840 (2016, QCEW)
- This industry comprises establishments primarily engaged in accepting demand and other deposits and making commercial, industrial, and consumer loans.
- Example businesses: American State Bank of Grygla, Community Bank of Red River Valley, Marshall County State Bank

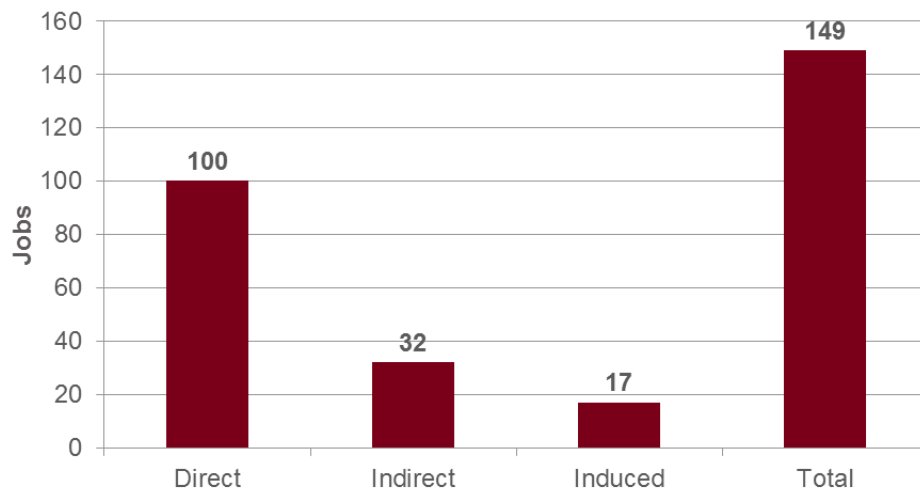
BANKING: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
95	101	6

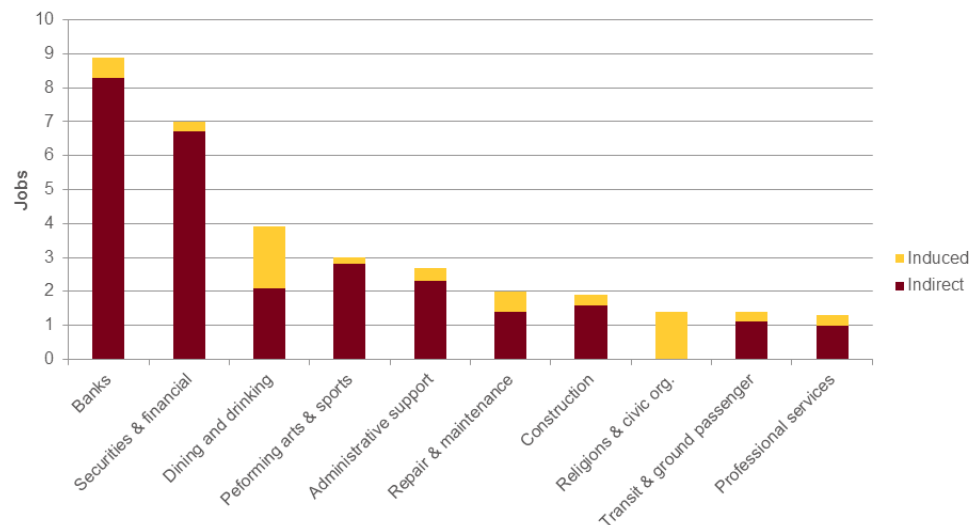
National Growth	Industry Mix	Competitive Effect
9	-12	10

Bottom line: Marshall County's employment in banking was steady during the period. Banking at the national level, however, shed jobs. Thus, Marshall County outperformed industry trends.

BANKING: MARSHALL COUNTY



BANKING: TOP INDUSTRIES IMPACTED



RICE MILLING: MARSHALL COUNTY

- 2 employees (2015, IMPLAN)
- 1 establishment
- \$2.4 million in output generated. (2015, IMPLAN)
- 96% of expenditures are for inputs
 - Grains, wholesale trade, management of companies
- 4% for labor
 - Average weekly wage: ~\$900 (2015, QCEW, food manufacturing)
- This U.S. industry comprises establishments primarily engaged in one of the following: (1) milling rice; (2) cleaning and polishing rice; or (3) milling, cleaning, and polishing rice. The establishments in this industry may package the rice they mill with other ingredients.
- Example businesses: Natural Ways Mills Trust

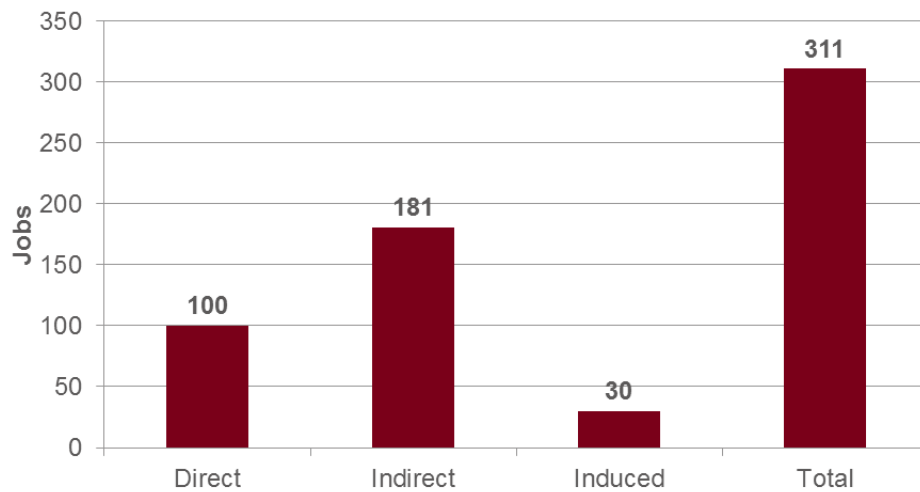
RICE MILLING: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
0	13	13

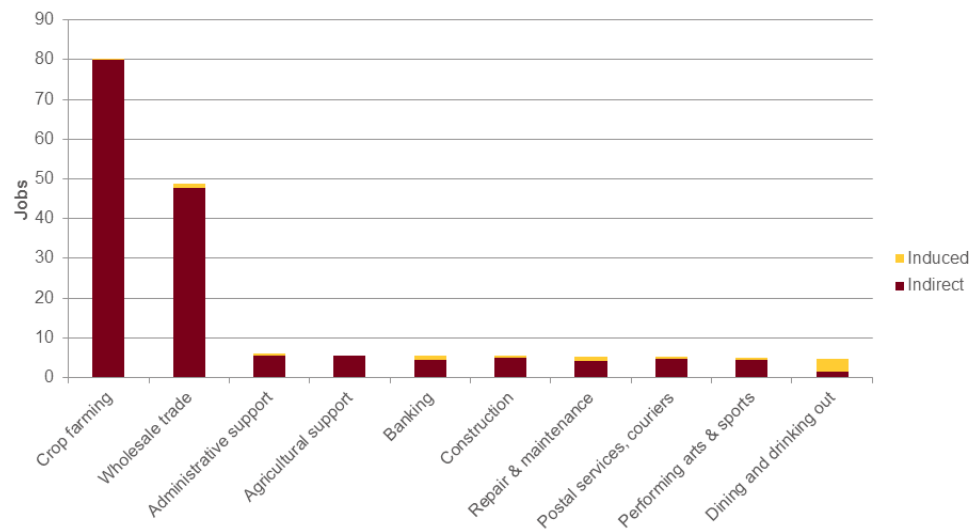
National Growth	Industry Mix	Competitive Effect
0	0	13

Bottom line: This industry is new to Marshall County since 2001. We cannot measure it's change in terms of the industry.

RICE MILLING: MARSHALL COUNTY



RICE MILLING: TOP INDUSTRIES IMPACTED



FLUID METER AND CONTROL DEVICE: MARSHALL COUNTY

- 60 employees (EMSI)
- 1 establishment
- \$186.8 million in output generated
- 55% of expenditures are for inputs
 - Semiconductors, other plastics products, turned products & screws
- 45% for labor
 - Average weekly wage: ~\$850 (2015, QCEW, all manufacturing)
- This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.
- Example businesses: Beamco/BMI Manufacturing?



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CONTROL DEVICE: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
0	60	60

National Growth	Industry Mix	Competitive Effect
0	0	60

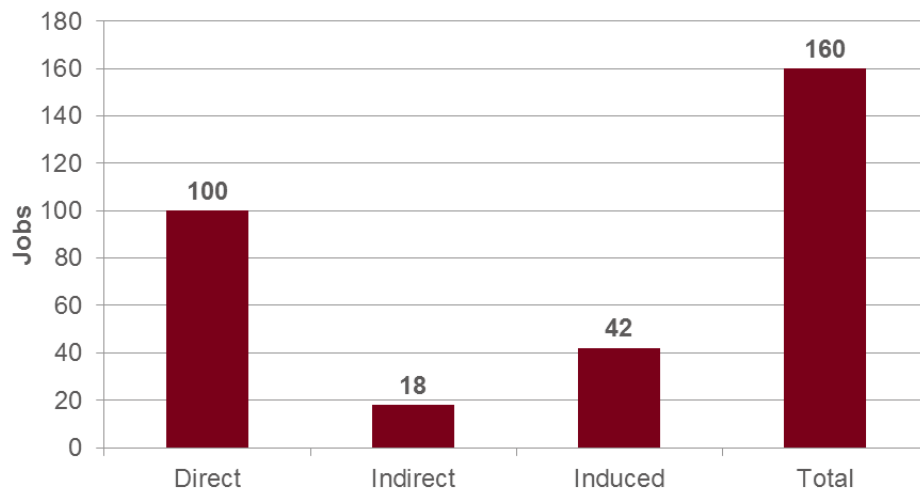
Bottom line: This industry is new to Marshall County since 2001. We cannot measure its change in terms of the industry.



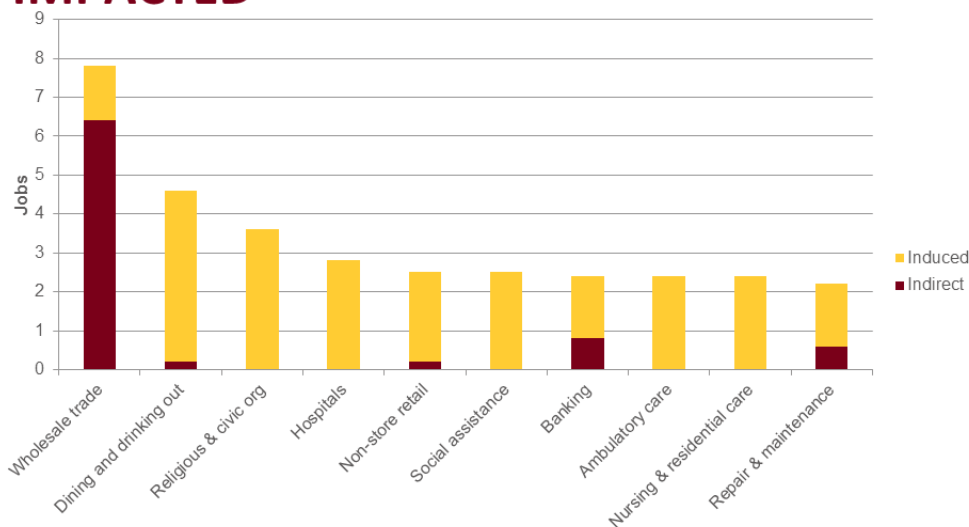
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CONTROL DEVICE: MARSHALL COUNTY



CONTROL DEVICE: TOP INDUSTRIES IMPACTED



CONSTRUCTION, NEW STREETS & HIGHWAYS: MARSHALL COUNTY

- 17 employees (2015, IMPLAN)
- 2 establishments
- \$ 2.8 million in output generated. (2015, IMPLAN)
- 64% of expenditures are for inputs
 - Lumber, management consulting, metal
- 36% for labor
 - Average weekly wage: ~\$1,242 (2015, QCEW)
- This industry comprises establishments primarily engaged in the construction of highways (including elevated), streets, roads, airport runways, public sidewalks, or bridges. The work performed may include new work, reconstruction, rehabilitation, and repairs.
- Example businesses: Gowan Construction, Spruce Valley

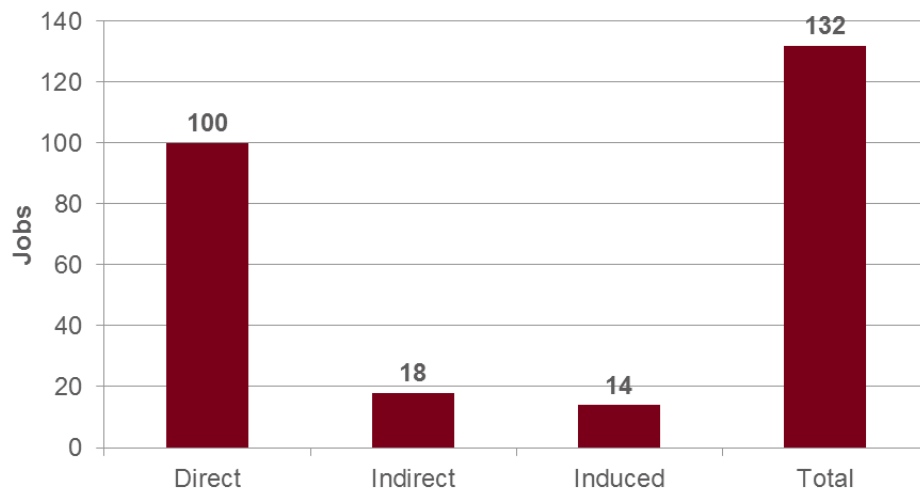
CONSTRUCTION: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
39	58	19

National Growth	Industry Mix	Competitive Effect
4	-8	23

Bottom line: Marshall County's new streets and highways businesses added jobs at a rate of nearly 50% in the period. Construction at the national level declined. Thus, Marshall County outperformed industry expectations.

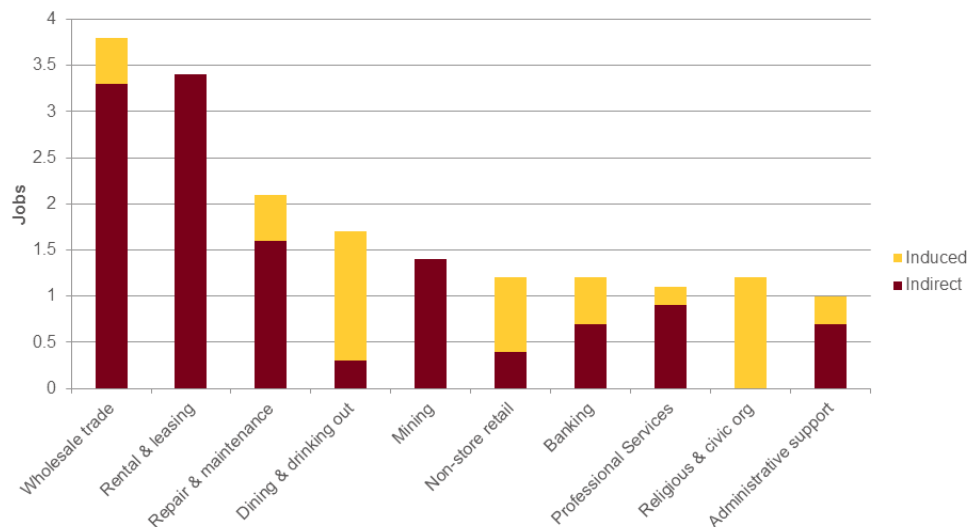
CONSTRUCTION: MARSHALL COUNTY



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CONSTRUCTION: TOP INDUSTRIES IMPACTED



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FULL SERVICE RESTAURANTS: MARSHALL COUNTY

- 54 employees (2015, IMPLAN)
- 7 establishments (2016, QCEW)
- \$ 2 million in output generated
- 58% of expenditures are for inputs
 - Management of companies, real estate, wholesale trade
- 42% of expenditures are for labor
 - Average weekly wage: \$147 (2016, QCEW)
- This U.S. industry comprises establishments primarily engaged in providing food services to patrons who order and are served while seated and pay after eating.
- Example businesses: Hobo Haus, Mick's of Warren?

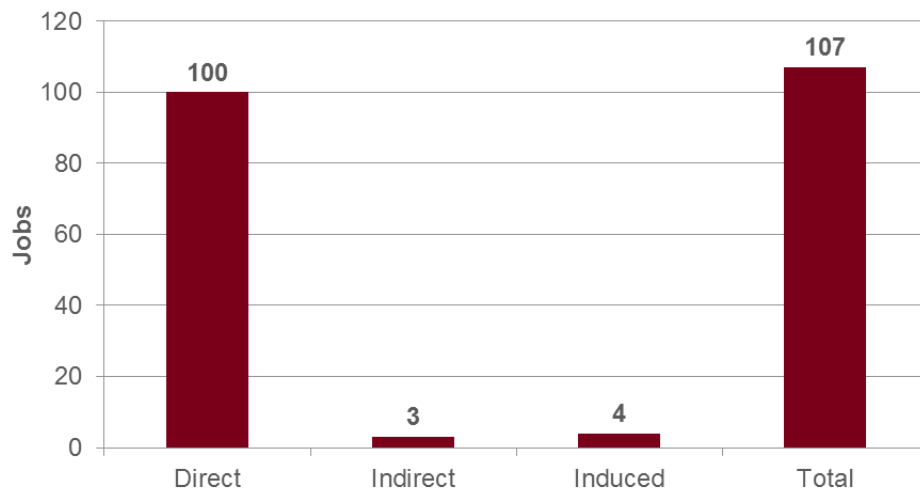
RESTAURANTS: INDUSTRY TRENDS

Jobs 2001	Jobs 2016	Change 2001-2016
57	49	-8

National Growth	Industry Mix	Competitive Effect
5	16	-29

Bottom line: Marshall County shed jobs in the full-service restaurant industry. Nationally, the industry added jobs. The county performed below industry expectations.

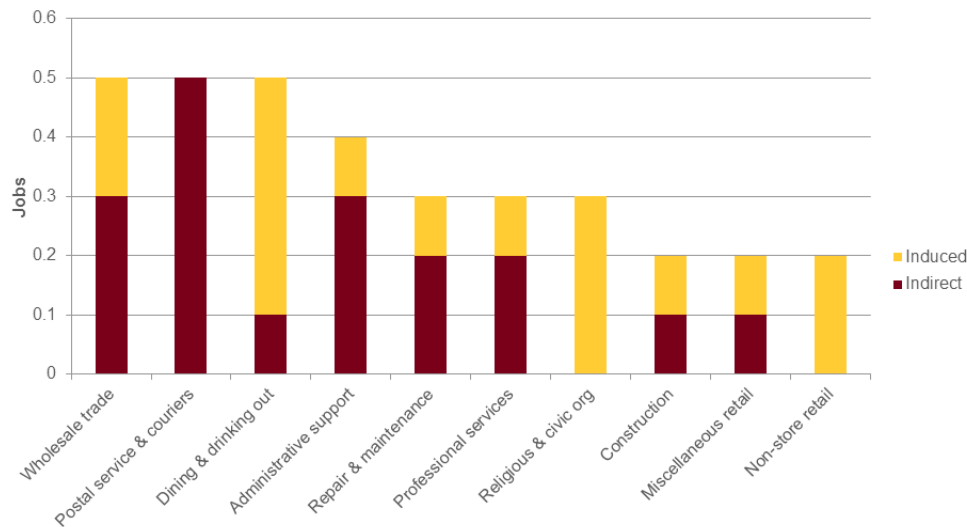
RESTAURANTS: MARSHALL COUNTY



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RESTAURANTS: TOP INDUSTRIES IMPACTED



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APPENDIX ONE: DEFINITIONS OF TERMS

Ten of Marshall County's industries were analyzed to measure their economic linkages. The results of the analysis are presented in this appendix. To allow for comparison, the analysis considers the economic impact of 100 jobs in each industry. This allows one to compare and contrast the types of impacts each industry has in the county. The IMPLAN model used in this analysis is linear; therefore, if a person wanted to consider the economic linkages of 10 jobs, it could be done by dividing the results for 100 jobs by 10.

Interpreting the results requires knowing several definitions. Those are included here.

Output

Output from the IMPLAN model is measured in dollars and is equivalent to total sales.

Employment

Employment includes full-time, part-time, and seasonal workers and is measured in annual average jobs. In other words, one job is one job regardless if it is full-time, part-time, or seasonal. Total wage and salaried employees as well as the self-employed are included in employment estimates in IMPLAN. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

Average Weekly Wage

The average weekly wage is from the Quarterly Census of Employment and Wages. It is calculated by taking total wages paid and dividing by the total number of employees and by 52 weeks. Thus, industries with a higher number of part-time employees may have lower average weekly wages. Wages include bonuses, stock options, severance pay, profit distributions, cash value of meals and lodging, tips, and other gratuities. In some states, employer contributions to certain deferred compensations plans (such as 401(k)).


Direct Impact

The direct impact is equivalent to the initial change in the economy. For this analysis, the direct impact is 100 jobs.

Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to **spending for inputs** (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase in output by the plant. As the plant increases output, it must also purchase more of its inputs, such as electricity, steel, and equipment. As it increases its purchase of these items, its suppliers must also increase their production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts.

Induced Impact



The induced impact is the summation of changes in the local economy that occur due to **spending by labor** – by the employees in the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have money to spend to purchase housing, buy groceries, and go out to dinner. As they spend their new income, more activity occurs in the local economy. This can be quantified and is called the induced impact.

Total Impact

The total impact is the summation of the direct, indirect and induced impacts.